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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,651	07/18/2005	Andrei Nikulin	671096.403USPC	6774
500	7590	10/27/2006	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC			THOMAS, COURTNEY D	
701 FIFTH AVE			ART UNIT	
SUITE 5400			PAPER NUMBER	
SEATTLE, WA 98104			2882	

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/518,651	NIKULIN, ANDREI	
	Examiner	Art Unit	
	Courtney Thomas	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 42-81 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 71-78 is/are allowed.
- 6) ☒ Claim(s) 42-70 and 79-81 is/are rejected.
- 7) ☒ Claim(s) 54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/18/05</u>  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 42-51, 61-70 and 79-81 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In particular, independent claims 42, 61 and 79-81 recite a series of steps directed to an analysis method, but do not physically transform received data such that it results in a *useful, concrete and tangible result* (emphasis added) as required by 35 USC 101. The absence of such transformation suggests that a useful result achieved under the practical application requirement has not been met. For examples of physical transformations that result in useful utility, see MPEP 2106 sect II-A. [See also USPTO Interim Guidelines for Subject Matter Eligibility available at: <http://www.uspto.gov/go/og/2005/week47/patgupa.htm> or OG Notices 22 November 2005]. Claims 43-51 and 62-70 are similarly rejected by virtue of their dependency on independent claims 42 and 61.

### *Claim Rejections - 35 USC § 102*

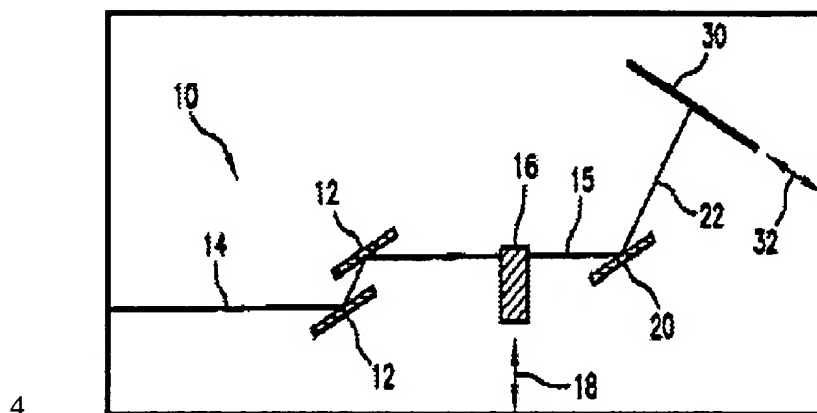
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 42-53, 55-60 and 79-81 are rejected under 35 U.S.C. 102(e) as being anticipated by Wernick et al. (U.S. Patent 6,947,521).



(57)

**ABSTRACT**

A method for detecting an image of an object by measuring the intensity at a plurality of positions of a transmitted beam of x-ray radiation emitted from the object as a function of angle within the transmitted beam. The intensity measurements of the transmitted beam are obtained by a crystal analyzer positioned at a plurality of angular positions. The plurality of intensity measurements are used to determine the angular intensity spectrum of the transmitted beam. One or more parameters, such as an attenuation property, a refraction property and a scatter property, can be obtained from the angular intensity spectrum and used to display an image of the object.

5.

Fig. 1 (top) & Abstract (bottom)- Analysis Method & Apparatus - U.S. Patent 6,947,521 to Wernick et al.

6. As per claims 42-53, 55-60 and 79-81, Wernick et al. disclose a method (and corresponding apparatus) of analysis of an object (16), comprising, a) generating a penetrating beam of radiation (14); b) diffracting the radiation from a monochromator (12) to provide a beam of monochromatic penetrating radiation (Fig. 1, shown above; column 4, lines 55-57); c) irradiating a portion of the object (16) with the beam of monochromatic penetrating radiation (14); d) diffracting, from an analyzer (20) onto a detector (30), penetrating radiation (15) that

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passes through the object (16) onto the analyzer (20); e) rotating the analyzer through a plurality of angular positions and e) measuring a plurality of intensities of the radiation incident on the detector (30) as a function of analyzer position (see Abstract above; column 5, lines 4-17). Examiner note: see column 5, lines 52-64 for discussions on detector type; for normalizations see columns 7-10.

***Allowable Subject Matter***

7. Claims 71-78 are allowed.
8. The following is a statement of reasons for the indication of allowable subject matter:
9. As per claim 71 and dependent claims 72-78, the examiner found no reference in the prior art that disclosed or made obvious an apparatus comprising a slit member defining a slit through which a beam passes prior to incidence of the beam on an object, wherein the slit has a size  $A$  in a direction transverse to the direction of propagation of the beam and calculated according to the formula:  $A \leq \lambda / \delta\theta$ , wherein  $\lambda$  is the wavelength of incident radiation and  $\delta\theta$  is optical resolution of the apparatus, as recited in independent claim 71.
10. Claim 54 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. As per claim 54, the examiner found no reference in the prior art that disclosed or made obvious an apparatus comprising a slit member defining a slit through which a beam passes prior to incidence of the beam on an object, wherein the slit has a size  $A$  in a direction transverse to the direction of propagation of the beam and calculated according to the formula:  $A \leq \lambda / \delta\theta$ , wherein  $\lambda$  is the wavelength of incident radiation and  $\delta\theta$  is optical resolution of the apparatus.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney Thomas whose telephone number is (571) 272-2496. The examiner can normally be reached on M - F (9 am - 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272 2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Courtney Thomas  
Primary Examiner  
Art Unit 2882